

Claims 1 through 67 are cancelled.

68. (New) A method of curing concrete utilizing at least one heating component within uncured concrete by energizing the heating component with electrical power to resistively heat the concrete to a first temperature and then modifying the electrical power to achieve a different temperature.
69. (New) The method of claim 68 wherein the amount of electrical power is modified to achieve a rate of compressive strength gain of the concrete.
70. (New) The method of claim 68 wherein the amount of electrical power is modified to achieve a rate of concrete cure.
71. (New) The method of claim 68 wherein the heating component comprises carbon fibers.
72. (New) The method of claim 68 wherein the heating component provides structural reinforcement to the concrete.
73. (New) The method of claim 68 further comprising heating the concrete at a substantially uniform rate.
74. (New) The method of claim 68 wherein the concrete contains heat responsive additives to activate a hydration reaction.
75. (New) The method of claim 68 wherein the concrete contains additives to retard a hydration reaction.
76. (New) A method of curing concrete comprising:
- conducting electrical energy through a heating component wherein at least a portion of the heating component is within the concrete;
 - achieving a first temperature of the concrete;
 - changing the amount of electrical energy so that the concrete achieves a second temperature;
 - continuing steps a through c to control a rate of cure of the concrete.
77. (New) A method of curing concrete comprising:
- conducting electrical energy through a heating component wherein at least a portion of the heating component is within the concrete;
 - achieving a first temperature of the concrete;

- c. changing the amount of electrical energy so that the concrete achieves a second temperature;
 - d. continuing steps a through c to control a rate of gain of compressive strength of the concrete.
78. (New) A method of heating a concrete surface by utilizing at least one heating component installed within the concrete prior to completion of curing and energizing the heating component to heat the concrete.
79. (New) A concrete structure comprising at least one heating component installed prior to the completion of concrete cure.
80. (New) The concrete structure of claim 79 wherein the heating component heats only a portion of the concrete structure.
81. (New) The concrete structure of claim 79 wherein the heating component can be energized after concrete cure to increase the temperature of a surface of the structure.
82. (New) A concrete structure comprising:
- a) at least one heating component within the concrete; and
 - b) at least one contact member to connect the heating element to an external electrical power source.
- 82 (New) The concrete structure of claim 82 wherein the heating component is tensioned within a form prior to placement of uncured concrete.
- 83 (New) The concrete structure of claim 82 wherein the heating component is placed within the structure in a manner to supply structural strength.
84. (New) A concrete structure comprising at least one heating component comprised of braided carbon fibers.
85. (New) The concrete structure of claim 84 wherein the heating component comprises multiple layered braided carbon fibers wherein one braid layer has a different braid angle than at least one other layer.
86. (New) A concrete structure comprising at least one heating component installed within the concrete prior to completion of concrete cure and that can be energized after cure to provide radiant heat from the concrete.

- 87.(New) The concrete structure of claim 86 comprising a wall.
- 88.(New) The concrete structure of claim 86 comprising a floor.
- 89.(New) The concrete structure of claim 86 comprising a ceiling.
- 90.(New) A table comprising temperature and time data of a rate of concrete cure for a heating component or heating component placement.